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AUTHOR Mertens, Donna M.
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ABSTRACT

This report documents the Appalachian Education Satellite Project's (AESP) delivery of a continuing education course entitled 'Visual Learning' to 55 educators at 10 sites in Appalachia in Spring 1977. The course was intended to assist teachers in making more practical use of television in the classroom. Presented are: (1) a brief overview of the structure and history of AESP; (2) an overview of the Visual Learning course including course development, structure, content, and objectives; and (3) the methodology and results of the evaluation of course delivery. (Author/STS)

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DEVELOPMENT, DELIVERY, AND EVALUATION OF AESP'S VISUAL LEARNING COURSE

Spring 1977

Prepared by

Donna M. Mertens

August 1977

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TABLE OF CONTENTS

LIST OF TABLES AND FIGURES iv

CHAPTER I

INTRODUCTION 1

Structure and History 1
Course Overview 2
Course Development 2
Course Structure 5

CHAPTER II

METHOD 9

Participants 9
Instruments 9
Achievement Tests 9
Attitude Questionnaire 13
Instructional Activities Rating Form 13
Equipment Report and Student Satisfaction Form 15
AESP Trouble Log 15

CHAPTER III

RESULTS 16

Instructional Activities 18
Videotaped Programs 21
Live, Interactive Seminars 24
Ancillary Activities 26
Feedback Questions 30
Equipment Functioning 31

CHAPTER IV

SUMMARY 38

BIBLIOGRAPHY 40

APPENDICES 41

LIST OF TABLES

Table		Page
1	STRUCTURE OF THE VISUAL LEARNING COURSE	6
2	FREQUENCY OF BACKGROUND CHARACTERISTICS FOR VISUAL LEARNING COURSE PARTICIPANTS	10
3	FACTOR LOADINGS ON ATTITUDE POSTTEST	14
4	MULTIVARIATE ANALYSIS OF VARIANCE RESULTS FOR COGNITIVE AND ATTITUDE PRE- AND POSTTESTS	17
5	UNIVARIATE AND STEP-DOWN F's FOR VISUAL LEARING COGNITIVE AND ATTITUDE PRE- AND POSTTESTS	18
6	AVERAGE RATINGS FOR THE PRE- AND POST- ATTITUDE QUESTIONNAIRE	19
7	SITE MONITORS' RATINGS OF STUDENT SATISFACTION	20
8	PART I: VISUAL LEARNING VIDEOTAPES	22
9	PART II: PARTICIPANT RATING OF LIVE, INTERACTIVE SEMINARS .	25
10	PART III: ANCILLARY ACTIVITIES	28
11	PART IV: FEEDBACK QUESTIONS	32
12	RANK ORDERING OF INSTRUCTIONAL COMPONENTS	33
13	SITE MONITORS' RATINGS OF THE AUDIO AND VIDEO SIGNALS RECEIVED VIA ATS-6 SATELLITE SYSTEMS	34
14	PARTICIPANTS' REACTIONS TO TELEVISION RECEPTION	35
15	SITE MONITORS' RATINGS OF VHF FUNCTIONING	37

Figure		
1	Map of the Appalachian Region Showing the Ten Sites that Participated in the Visual Learning Course	12

CHAPTER I

INTRODUCTION

The purpose of this report is to document the Appalachian Education Satellite Project's (AESP) delivery of a continuing education course titled "Visual Learning" to 55 teachers and other educators at 10 sites in Appalachia in the Spring of 1977. In this introductory section, a brief overview of the structure and history of AESP is presented. An overview of the Visual Learning course is then presented, including the development of the course, the course structure, and the course content and objectives. The following sections document the methodology and results of the evaluation of the course delivery.

Structure and History of AESP

AESP's goal is to utilize the capabilities of satellite telecommunications for the purpose of providing instructional and informational services and resources to all segments of the Appalachian community. From its inception, AESP was a joint venture of the National Aeronautics and Space Administration (NASA), the Division of Education of the Appalachian Regional Commission (ARC), a Resource Coordinating Center (RCC) located at the University of Kentucky, and Regional Education Service Agencies (RESAs) located in eight states in Appalachia.

NASA provided the communications satellite technology and hardware which allowed AESP to broadcast over the entire Appalachian Region. ARC was the prime contractor, fiscal agent, and manager of the project. The RCC provided academic, evaluation and television expertise for planning, producing and broadcasting the courseware and for evaluating the courses

and the overall success of the project. The RESAs operated the local sites during the implementation of the courses and served in an administrative capacity in the coordination of local resources.

During its initial phase (1973-1975), AESP delivered four graduate credit continuing education courses -- two each in reading and career education -- to approximately 1200 Appalachian teachers and educators. Following this successful experimental effort, AESP entered a planning phase (1975-1976) which resulted in the identification of a diversity of programming needs throughout Appalachia and the identification of high quality programming to meet those needs. (See AESP Technical Reports 13 and 14 for a report of AESP's needs assessment results.) AESP's present plan is to expand the number of receiving sites, the types of audience, the formats of delivery, and the innovative uses of satellite technology.

Course Overview

As a part of AESP's 1977 Spring delivery phase, a one hour graduate course, "Visual Learning," was delivered to 55 teachers and other educators at 10 Appalachian sites. The televised programs and related activities which comprise "Visual Learning" focus on assisting teachers to make more practical use of television in their classrooms. This involves a basic understanding of the proper use of equipment, knowledge of the availability of local and national programming resources, and an examination of attitudes and motivations with regard to the use of television in the classroom.

Course Development

The core of the Visual Learning course consisted of five videotapes and printed guides to accompany each tape which were produced by the New

York State Education Department's Bureau of Educational Communications in cooperation with the New York State Appalachian BOCES Consortium and funded by the Appalachian Regional Commission. In order to supplement the video-tapes and booklets, AESP developed ancillary activities to accompany each tape and produced two live seminars during the course delivery.

Course development was based on a formative evaluation study conducted by AESP's Evaluation Component. A set of objectives and content outlines and a preliminary plan for ancillary activities were developed at AESP. AESP Site Directors selected 25 media specialists and educators throughout Appalachia to review the objectives and content outlines and the ancillary materials. Two evaluation instruments were used to obtain the reviewers reactions: External Review of Objectives and Content Outline and Rating Scale for Ancillary Activities (copies of these instruments can be found in Appendix 1).

Seventeen of the reviewers completed and returned the evaluation forms for a return rate of 68%. The frequency of return by geographical area was:

Location	Frequency
New York	6
Maryland	4
Virginia	3
Tennessee	0
Alabama	4

There were 7 male and 8 female reviewers; 2 reviewers did not respond to this item. The occupations of reviewers were as follows:

Occupation	Frequency
Media specialist	7
Teacher	2
Principal	1
Librarian	1
Producer-writer	1
No response	5

The reviewers were associated with 12 different institutions of learning.

All of the revisions for Visual Learning occurred with the objectives and ancillary materials, as the videotapes and booklets had a fixed format and sequence. In general, the ancillary materials were positively reviewed. The reviewers made the following comments:

"The ancillary activities are more meaningful than the tapes."

"They are very thorough."

"They are impressive."

"Ancillary activities are the best part of the program. They complement the tapes quite well."

One of the most frequently used techniques in the ancillary materials was on-site discussion among the participants. Although the reviewers recognized the benefit of such interaction, they did recommend that a greater variety of activities be included. This goal was achieved by having teachers poll their students, have debates, develop discussion topics, use TV and film catalogs, write lesson plans, have "hands-on" use of videocassette players when local equipment was available, simulate a school board meeting, and, of course, watch and critique TV programs. More actual production was suggested, but this was impossible due to lack of equipment. A topic recommended for discussion was the effect of TV on children and the PTA's stand on violence. This was achieved through the articles: "What TV does to Kids," and "Screening TV for Uncritical Young Eyes." Also, CATV and Educational TV were suggested as discussion topics. Not only were they discussed, but participants had to watch educational TV programs and evaluate them and had to use local education television catalogues. It was suggested that participants view a production in progress, but due to the geographic isolation of some sites, this would have been impossible.

For session one's debate topic, "Is television an educational tool?", it was suggested that participants be able to back up their arguments with specific examples. The polling they did with their students accomplished this goal. It was also recommended that teachers apply the course to their specific situations. Teachers utilized Visual Learning materials or concepts by polling their students, watching their favorite programs, developing topics for discussion for their classes, doing lesson plans, choosing programs from the Educational TV guides for their classes, and finding out about local equipment and resources.

Another recommendation was to provide more materials. These materials included other catalogues and guides as well as reading selections. The Teacher's Guides to Television, ITV catalog, Free Film catalogs, and local educational television guides were provided to enable teachers to learn more about different programs. Numerous reading selections were also added to the course. In addition a bibliography was provided listing additional materials and organizations.

A few reviewers felt that an enthusiastic instructor (site monitor) was necessary. It was also recommended that the street interviews be deleted from the tapes but this was impossible to do. Finally, one reviewer suggested the course should be made longer and offered for more than one credit hour.

Course Structure

Table 1 presents the structure of the Visual Learning course as it was delivered in the Spring of 1977. The major components of the course consisted of preprogram readings, in-class ancillary activities, follow-up

TABLE 1

STRUCTURE OF THE VISUAL LEARNING COURSE

Date	Session Number	Content
4/04/77	Organization	Student Registration and Pretest
4/14/77	1	Ancillary Activities Introductory Program Program 1: Towards Visual Learning
4/21/77	2	Ancillary Activities Program 2: The Many Faces of Television Seminar 1
4/28/77	3	Ancillary Activities Program 3: Television in the Classroom
5/05/77	4	Ancillary Activities Program 4: The Mechanics of Television
5/12/77	5	Ancillary Activities Program 5: Program Acquisition Seminar 2 Final Examination

activities, videotapes, and live seminars. The in-class ancillary activities and follow-up activities were designed to provide course participants with the opportunity to apply many of the concepts learned in the course. The live seminars allowed the participants an opportunity to ask questions of media experts and other educators and receive their answers in "real" time via satellite. A list of the panel member for each seminar is included in Appendix 2.

The objectives for each session of Visual Learning were as follows:

April 14 - Session One Objectives

1. The participants will investigate the rationale for visual learning (i.e., the power and influence television has in today's culture.)

2. The participants will explore the capabilities of television as a medium of instruction; for example, measuring reading speed, demonstrating life-saving techniques, teaching reading, etc.

3. The participants will assess their own and their students' attitudes toward television and compare these attitudes with those expressed in the Newsweek article.

April 21 - Session Two Objectives

1. The participants will examine their own and other's attitudes toward television as a medium of instruction.

2. Participants will be introduced to the perspectives and viewpoints of television professionals in different areas and the assets and limitations of television in these areas.

3. Participants will increase their critical awareness of television programming.

4. Participants will be introduced to printed resource materials and catalogues for commercial and educational television and for "free" materials.

5. Participants will become aware of how a particular program utilizes the TV medium and critically evaluate instructional and educational television.

April 28 - Session Three Objectives

1. The participants will learn basic steps for incorporating television into their teaching (i.e., classroom setup, program preparation, during program activity, and follow-up.)

2. The participants will be able to make the guidelines for television utilization applicable to their specific teaching needs and situations through performing the learning activities connected with the program.

3. The participants will be able to write lessons plans which utilize television.

4. Participants will recognize the importance of setting up an appropriate environment in order to make the television program most effective.

May 5 - Session Four Objectives

1. Participants will be able to operate a video-cassette player.

2. Participants will be able to operate a color television set.

3. Participants will develop a positive attitude toward their ability to operate a videocassette player and color television set.

May 12 - Session Five Objectives

1. Participants will be able to cite examples of good videotape use by teachers.

2. Participants will develop a more positive and broader opinion of the way videotape might be used in the classroom.

3. Participants will be able to formulate arguments why media such as television and videocassettes are beneficial in the school environment.

4. Participants will be able to work out individual problems concerning implementation of TV and video-cassettes in their classroom by discussing their situations with local experts in media instruction.

CHAPTER II

METHOD

Participants

The participants consisted of 55 teachers and other educators at 10 sites in Appalachia. The background characteristics of the participants are presented in Table 2. Figure 1 depicts the geographical location of the 10 receiving sites.

Instruments

Seven different instruments were used to evaluate different aspects of the course. These were: Visual Learning Pre- and Posttests, Combined Attitude and Background Questionnaire for Visual Learning, Attitude Questionnaire (posttest), Instructional Activities Rating Form, Equipment Report and Student Satisfaction Form, and the AESP Trouble Log. These forms are included in Appendix 3, with the exception of the cognitive pre- and posttests.

Achievement Tests

Prior to the first class meeting, a cognitive pretest which consisted of 30 multiple choice items, was administered. The items were written to correspond to the course objectives. Five weeks later, the same 30 item test was administered on the last day of class to measure the learning that occurred as a result of participating in the course.

TABLE 2

FREQUENCY OF BACKGROUND CHARACTERISTICS FOR VISUAL LEARNING COURSE PARTICIPANTS

Characteristics	Frequency
Location	
Huntsville, AL	5
Rainsville, AL	2
LaFollette, TN	4
Norton, VA	4
Boone, NC	3
Cumberland, MD	10
McHenry, MD	15
Fredonia, NY	5
Olean, NY	4
Edinboro, PA	3
*Sex	
Male	15
Female	37
Type of community in which working	
Rural	32
Suburban	8
Urban	9
No response	3
Age	
21 - 30	24
31 - 40	11
41 - 50	11
51 - 60	5
No response	1
Position during 1976-77 academic year	
Classroom teacher	36
Librarian	4
Media specialist	3
Other	9

*Background information is unavailable for three of the participants

TABLE 2 -- CONTINUED

Characteristics	Frequency
Grade level taught (or worked with)	
Elementary - all grades	7
1 - 3	12
4 - 6	10
7 - 9	10
10 - 12	10
No response	3
Length of work experience in teaching	
1 year or less	4
2 - 4 years	10
5 - 8 years	15
9 - 15 years	10
16 years or more	11
No response	2
Undergraduate grade-point average	
less than 2.50	6
2.51 - 2.75	11
2.76 - 3.25	18
3.26 - 3.50	9
3.51 - 4.00	6
No response	2
Graduate grade-point average	
less than 3.00	1
3.01 - 3.25	6
3.26 - 3.50	4
3.51 - 2.75	12
3.76 - 4.00	13
No response	16
Last degree completed	
High school diploma	2
Baccalaureate	32
Master's degree	17
No response	1
Purpose of present college enrollment	
Baccalaureate degree	1
Master's degree	8
Enrolled in course to maintain teaching certificacte	14
Other	6
Not enrolled	21
No response	2

APPALACHIA

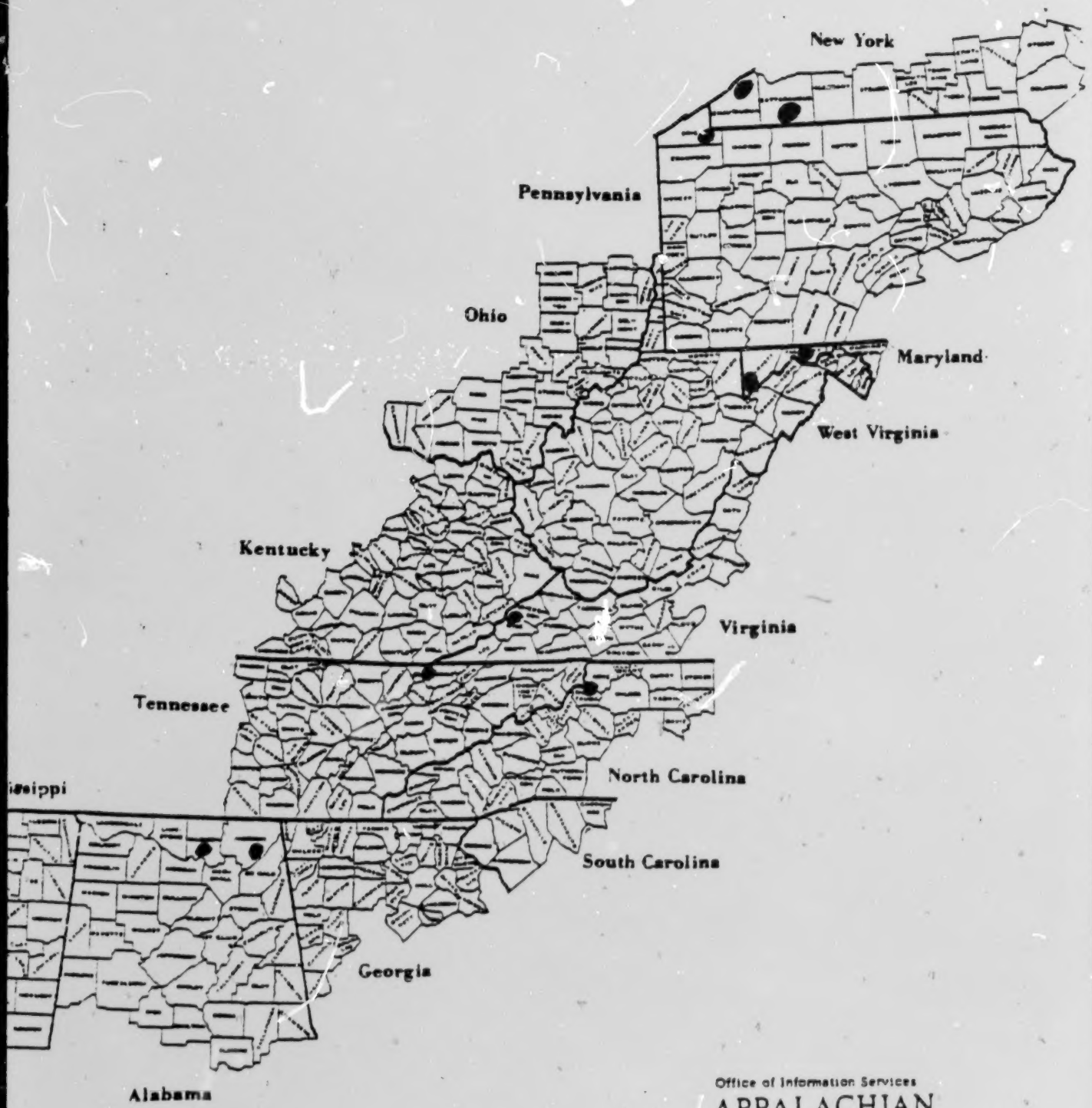

Figure 1 - Map of the Appalachian Region showing the Ten Sites that Participated in the Visual Learning Course.

Attitude Questionnaire

The attitude portion of the questionnaire was administered to participants on a pre-post basis. It consisted of 20 items that were rated on a 5-point Likert scale, with 5 indicating strongly agree and 1 indicating strongly disagree. The purpose of this instrument was to measure participants' attitudes toward television and the use of media in the classroom.

Factor analysis revealed a unifactor structure. The first factor accounted for 67% of the total variance and 85% of the total common variance. Loadings for this factor are presented in Table 3. Items having loadings less than between +.41 and -.41 were deleted for purposes of scoring. Responses to the 18 items remaining on the scale were added together to provide a single measure of participants attitudes toward the concepts presented in the course. Item scores for negatively worded items were reversed for scoring purposes.

Instructional Activities Rating Form

This instrument was completed by all of the participants after every class session. It was designed to measure the participants' reactions to each day's activities. The instrument was divided into four parts: Part I consisted of 15 multiple choice questions designed to measure participant reaction to the taped TV programs. Part II consisted of 8 multiple choice questions designed to measure participant reaction to the interactive seminars. This section of the instrument was completed after the two seminars which occurred during sessions 2 and 5. Part III consisted of 14 multiple choice questions designed to measure participant reaction to the ancillary activities. Part IV consisted of 8 multiple choice questions designed to provide overall feedback about the various course components.

TABLE 3

FACTOR LOADINGS ON ATTITUDE POSTTEST

	Item	Loading
1.	Cable television can generate a sense of community.	.72
2.	Videotapes can be used to promote self-awareness.	.93
3.	Videocassette players are difficult to use.	-.95
4.	Television can teach values.	.95
5.	Adults should watch certain TV shows with their children.	.89
6.	There is nothing on commercial TV that my students should watch.	-.82
7.	Students don't read well because they watch too much television.	-.42
8.	Television is forcing teachers to be more entertaining.	.31*
9.	There are no programs broadcast during the school day that could be used in my classroom.	.79
10.	People ought to stop criticizing children's TV programs and commercials.	-.15*
11.	TV can be used in reaching students of all ages and backgrounds.	.95
12.	Curriculum guides (teachers' guides for ITV programs) are helpful.	.95
13.	TV and video can help teachers to individualize their classes.	.95
14.	People can learn some things more effectively from a TV than from a teacher.	.91
15.	After parents, TV has become perhaps the most potent influence on the beliefs, attitudes, values, and behavior of young people.	.92
16.	For some children, TV may provide more sustenance than their home lives.	.90
17.	Students watch so much television at home that they should not watch it during school hours.	-.83
18.	Distributing TV scripts in advance of programs to be broadcast for teaching reading can advance student's reading skills.	.85
19.	A teacher should be with students before and after viewing TV or video.	.89
20.	Teachers need not be in their classrooms while their students are watching a program.	-.82

*Items deleted for scoring purposes

Equipment Report and Student Satisfaction Form

This form was completed by the site monitor at the conclusion of each class session. It was designed to measure both the technical functioning of the equipment and the site monitors' perception of student reaction to the course components.

AESP Trouble Log

This form was completed by the site monitor only on those occasions when a failure occurred with non-satellite equipment. If a failure occurred with satellite equipment, site monitors were instructed to call the Engineering Service Center who would then keep a record of such failures.

CHAPTER III

RESULTS

How were students' learning and attitudes affected?

A pre- to posttest gain was used as the basis for analysis to ascertain the amount participants had learned and the amount of attitude change as a result of the course. The percentage correct of the 30 item cognitive pre- and posttests and the average rating on the 5-point scale on the 18 item attitude pre- and posttests were used for the analysis.

The analysis of variance design was a 10 site by 2 administration design. Both attitude and achievement were included in the analysis, thereby, making a multivariate analysis of variance (MANOVA) design appropriate. Procedures described by Finn (1968, 1969) for repeated measures designs were followed.

The results indicated a signficant difference for sites (multivariate $F = 2.15$, $p < .0105$), for administrations (multivariate $F = 17.16$, $p < .0001$), and for the interaction of sites by administrations (multivariate $F = 2.44$, $p < .0037$). The multivariate results are reported in Table 4.

The difference for sites and sites by administrations occurred only for the cognitive test (see Table 5). This is not surprising as the rate of change from site to site varied considerably. The least amount of change from pretest to posttest was a gain of 3 percentage points at one site, while another site gained an average of 38 percentage points from pre- to posttest.

The significant effect for administrations occurred for both the cognitive and attitude measures. The univariate and step-down F's for this analysis are presented in Table 5. The average attitude score on the pretest

TABLE 4

MULTIVARIATE ANALYSIS OF VARIANCE RESULTS FOR
COGNITIVE AND ATTITUDE PRE- AND POSTTESTS

Source	df	Multivariate F	p <
Between Subjects			
Sites	18,82	2.15	.0105
Within Subjects			
Administrations	2,39	17.16	.0001
Sites by Administrations	18,78	2.44	.0037

TABLE 5

UNIVARIATE AND STEP-DOWN F's FOR VISUAL LEARNING
COGNITIVE AND ATTITUDE PRE- AND POSTTESTS

Source	Univariate F	p<	Stepdown F	p<
Sites				
Attitude	.91	.52	.91	.52
Cognitive	3.78	.0015	3.70	.0019
Administrations				
Attitude	25.07	.0001	25.07	.0001
Cognitive	7.18	.0107	6.07	.0183
Sites by Administrations				
Attitudes	1.50	.18	1.50	.18
Cognitive	3.87	.0014	3.57	.0026

was 4.07; this decreased significantly on the posttest to 3.87. The average score on the cognitive pretest was 59.70; this increased significantly to 75.13 on the posttest. Therefore, the course had the effect of lowering participants' attitudes toward visual learning and the use of television in the classroom, and of increasing their knowledge about these concepts.

This lowering of participants' attitudes toward visual learning is a serious problem. Several of the objectives of the course were attitudinal, designed to improve teachers' attitudes toward using media in their classrooms and to increase their awareness of the power of the media. The average ratings for each item on the attitude questionnaire for the pre- and post-administrations are presented in Table 6. These means indicate that after completing the course, the participant attitudes were more negative concerning the ability of videotapes to promote self-awareness, the necessity of adults to watch television with their children, the ability of TV to reach students of all ages and backgrounds, the helpfulness of curriculum guides for ITV programs, the potency of TV's influence on young people, and the necessity for a teacher to be with her/his students while they are watching a program. The course was designed to increase, rather than decrease teachers' attitudes toward these concepts. Therefore, each aspect of the course needs to be critically scrutinized to determine the reason the participants' attitudes were negatively affected. This problem is discussed further in the following section about the instructional activities used in Visual Learning.

Instructional Activities

How effective were the instructional activities included in the course? How might they be improved?

TABLE 6

AVERAGE RATINGS FOR THE PRE- AND POST- ATTITUDE QUESTIONNAIRE

Item	Pretest	Posttest
1. Cable television can generate a sense of community.	3.46	3.58
2. Videotapes can be used to promote self-awareness.	4.31	3.88
3. Videocassette players are difficult to use.	2.11	2.00
4. Television can teach values.	4.23	3.90
5. Adults should watch certain TV shows with their children.	4.63	3.88
6. There is nothing on commercial TV that my students should watch.	1.59	2.10
7. Students don't read well because they watch too much television.	3.00	2.83
8. There are no programs broadcast during the school day that could be used in my classroom.	1.96	2.39
9. TV can be used in reaching students of all ages and backgrounds.	4.38	4.00
10. Curriculum guides (teacher's guides) for ITV programs are helpful.	4.43	3.96
11. TV and video can help teachers to individualize their classes.	3.98	3.96
12. People can learn some things more effectively from a TV than from a teacher.	3.98	3.83
13. After parents, TV has become perhaps the most potent influence on the beliefs, attitudes, values, and behavior of young people.	4.38	3.83
14. For some children, TV may provide more sustenance than their home lives.	4.06	3.86
15. Students watch so much television at home that they should not watch it during school hours.	2.25	2.42
16. Distributing TV scripts in advance of programs to be broadcast for teaching reading can advance student's reading skills.	3.96	3.86
17. A teacher should be with students before and after viewing TV or video.	4.21	3.88
18. Teachers need not be in their classrooms while their students are watching a program.	1.81	1.88

Feedback was collected concerning participant reaction to the videotaped programs, live, interactive seminars, ancillary activities, and the overall course. The participants completed the Instructional Activities Rating Form, and the site monitors completed the Equipment Report and Student Satisfaction Form. These forms provided separate ratings for each day's activities, and this information will be useful for course revision. While differences did appear for the individual daily ratings, this report will focus on the reactions for the five sessions combined across all occasions. This section of the report describes participant reaction to the videotaped programs, the live, interactive seminars, and ancillary activities, and the overall course. The site monitors' ratings of the videotaped programs, seminars, and ancillary activities are presented in Table 7.

TABLE 7

SITE MONITORS' RATINGS OF STUDENT SATISFACTION

Rating	Taped Program	Live Seminar	Ancillary Activities
Excellent	19	6	13
Very good	17	5	11
Good	12	2	17
Fair		2	3
Poor		1	

Videotaped Programs

Participant reaction to the videotaped programs was between "very good" and "good" (see Table 8). On a scale from 1 to 5 with 1 representing excellent and 5 representing poor, the participants gave the videotaped programs an average rating of 2.27. The site monitors' perceived student satisfaction to be slightly more positive. On the same 5-point scale, the average rating of student satisfaction by the site monitors was 1.84.

The participants' ratings of specific aspects of the videotaped programs supported this generally positive reaction. They indicated that the presenter was quite acceptable (the presenter was TV celebrity Mr. Gene Shallit). Overall, the majority of the participants (77%) felt the theoretical aspects of each topic were adequately covered. While 64% of the participants thought an adequate amount of time was spent discussing procedures for using the materials, 34% felt that more time should have been spent on this topic. This same concept was expressed by 47% of the participants who felt more time should have been spent showing more actual applications of techniques in the classroom (46% felt program coverage was adequate on this topic).

When asked what effect the information contained in the programs would have on their teaching, the participants reacted as follows: Forty-seven percent said they planned to use the information and an additional 7% said they were already using such information. Twenty-five percent said they would like to use it but probably would not be able to. Fourteen percent responded that such information had little or no relevance for their teaching situations. This may be the result of a lack of accessibility to instructional television or other media in the schools.

TABLE 8

PART I. VISUAL LEARNING VIDEOTAPES

Item	Content	Frequency	Percentage
1.	The presenter's discussion of the material was:		
	a) excellent	81	32%
	b) very good	104	41%
	c) good	57	23%
	d) fair	9	4%
	e) poor	0	0%
2.	The interviews of experts or practitioners were:		
	a) excellent	35	15%
	b) very good	80	34%
	c) good	95	40%
	d) fair	24	10%
	e) poor	4	2%
3.	Discussion of the theoretical aspects of each topic should have covered:		
	a) much more time	5	2%
	b) somewhat more time	42	17%
	c) coverage was adequate	194	77%
	d) somewhat less time	9	4%
	e) much less time	1	.4%
4.	Discussion of procedures for using the materials should have covered:		
	a) much more time	19	8%
	b) somewhat more time	64	26%
	c) coverage was adequate	158	64%
	d) somewhat less time	6	2%
	e) much less time	2	1%
5.	Examples of the actual application of techniques in the classroom should have covered:		
	a) much more time	44	18%
	b) somewhat more time	72	29%
	c) coverage was adequate	114	46%
	d) somewhat less time	13	5%
	e) much less time	6	2%

TABLE 8 -- CONTINUED

Item	Content	Frequency	Percentage
6.	The program might have been more effective if they had covered:		
	a) less material but in greater depth	26	10%
	b) less material	7	3%
	c) more material in less depth	13	5%
	d) more material relevant to the central issues of the topic	35	14%
	e) program coverage was adequate	170	68%
7.	Which of the following might have made the presenter more acceptable:		
	a) if he spoke more clearly	6	2%
	b) if he appeared more knowledgeable about the subject area	3	1%
	c) if he spoke in a more natural manner	6	2%
	d) he was quite acceptable	231	92%
8.	The program might have been easier to follow with:		
	a) less background noise	96	43%
	b) more careful organization of content	11	5%
	c) greater amplification of main points	62	28%
	d) more summary statements	51	23%
9.	What effect do you think information contained in the program will have on your teaching?		
	a) has little or no relevance for me in my teaching situation	34	14%
	b) would like to use but probably won't be able to	62	25%
	c) would like to use but don't understand enough	20	8%
	d) plan to use	116	47%
	e) alreay know or am using	17	7%
10.	The pace of the program should be:		
	a) much slower	4	2%
	b) somewhat slower	22	9%
	c) pace was satifactory	201	80%
	d) somewhat faster	23	9%
	e) much faster	2	.8%
11.	What is your overall evaluation of the TV program?		
	a) excellent	52	21%
	b) very good	100	40%
	c) good	76	30%
	d) fair	22	9%
	e) poor	0	0%

The ability to use information in one's classroom is one of the most important criteria for judging the value of a course. The fact that 46% of the participants indicated that they would be unable to use the information presented in the course is important. This factor may explain why participants' attitudes were negatively affected as a result of participating in the course. It is possible that the participants were brought to a higher level of consciousness concerning the variables involved in using media in the classroom, and their inability to apply these concepts resulted in a more negative attitude.

In future deliveries of this course, several factors must be considered: 1) Emphasis of the broader applicability of the visual learning concepts; 2) Emphasis of the identification of local resources to aid in the application of visual learning concepts in the classroom; 3) Increased sensitivity to the instructional activities designed to teach attitudinal objectives.

Live, Interactive Seminars

The participants overall reaction to the live, interactive seminars was slightly less positive than their reactions to the videotaped programs (see Table 9). The average rating was 2.48. The first seminar received a higher rating than the second seminar (2.22 compared to 2.74). This is quite similar to the site monitors' ratings of student satisfaction. The overall rating for the two seminars was 2.19, with the first seminar receiving a rating of 1.50 and the second a rating of 2.88.

The participants' ratings of specific aspects of the seminar indicated that they were generally satisfied with the panel members and the moderator. The main source of dissatisfaction was with the quality of the answers re-

TABLE 9

PART II: PARTICIPANT RATING OF LIVE, INTERACTIVE SEMINARS

Item	Content	Frequency	Percentage
16.	Which of the following would have made today's seminar more effective?		
	a) the moderator answering the questions himself without guests	4	4%
	b) use more teachers as guests	18	17%
	c) use more professors or other experts as guests	10	10%
	d) the seminar participants were fine	71	68%
17.	Which one of the following formats might help you think of more meaningful questions to ask?		
	a) have at the beginning of the seminar a 10 minute summary of course content covered since the last seminar	21	21%
	b) show a 10 minute film with short segments from previous programs at the beginning of the seminar	9	9%
	c) show at the beginning of the seminar a short film illustrating several new classroom demonstrations of the material covered	42	42%
	d) have the opportunity to use the whole seminar for question answering and discussion rather than spending part of the program for question stimulation	26	26%
	e) other	1	1%
18.	The answers to the questions could have been more valuable if there had been:		
	a) less discussion of theoretical aspects of the questions	6	6%
	b) more frequent use of specific classroom examples	31	30%
	c) more direct answers to questions	19	18%
	d) less repetition in the guests' answers	0	0%
	e) I was very satisfied with the answers I heard	48	46%

TABLE 9 -- CONTINUED

Item	Content	Frequency	Percentage
19.	The seminar moderator could have been more effective if he had:		
	a) kept the guests on topic better	2	2%
	b) provided summary statements occasionally	13	12%
	c) allowed each guest equal time to respond to questions	10	9%
	d) kept the seminar moving at a faster pace so more questions could be answered	15	14%
	e) the seminar moderator was fine	65	62%
22.	What is your overall evaluation of today's seminar?		
	a) excellent	19	18%
	b) very good	37	36%
	c) good	29	28%
	d) fair	15	15%
	e) poor	3	3%

ceived to their questions. Forty-seven percent of the participants were satisfied with the answers they received during the first seminar and 41% were satisfied during the second seminar. The participants' responses indicated that during the first seminar, 12% wanted more direct answers to their questions and during the second seminar this rose to 28%. It may be that the content dealt with in the second seminar did not lend itself to simple, direct answers, or perhaps the participants had higher expectations for the second seminar.

Ancillary Activities

The ancillary materials consisted of pre-program preparations, in-class activities, and follow-up activities. In addition, a set of reference

materials was present in each classroom for the participants to use. The participants' overall rating of the ancillary activities was between "very good" and "good" (see Table 10). The average rating was a 2.61 on the same 5-point scale used to rate the videotapes and seminars. The site monitors rated the students' satisfaction with the ancillary materials slightly more positively; they gave the ancillary activities an average rating of 2.23.

Some of the students' dissatisfaction arose from the quality and quantity of the reading material that was assigned for class preparation. The participants were asked to respond to the statement, "Too much reading material was assigned for class preparation." Thirty-seven percent of the respondents agreed with this statement; 28% responded neutrally; and 34% disagreed with the statement. They were also asked to react to the quality of the reading assignments by responding to the statements, "Preparatory readings should have been more relevant to the ancillary activities." Twenty-one percent agreed with this statement; 47% responded neutrally; and 31% disagreed with the statement.

The ancillary activities that were completed in class were rated quite favorably by the participants. They indicated that these activities were both relevant to the videotaped programs as well as practical and applicable to the classroom. The instructions for the ancillary activities were clear and the amount of material covered in each unit was adequate.

The participants were also asked to rate the usefulness of the homework. Fifty-two percent agreed the homework was useful; 28% reponded neutrally to this item; and 20% felt it was not useful.

TABLE 10

PART III: ANCILLARY ACTIVITIES

Item	Content	Frequency	Percentage
24.	How often did you use materials from the reference shelf during class time?		
	a) very often	6	3%
	b) often	47	20%
	c) occasionally	85	36%
	d) rarely	38	16%
	e) never	58	25%
25.	How much time did you usually spend working on the ancillary activities during class?		
	a) 30 minutes or less	80	33%
	b) 45 minutes	75	31%
	c) 60 minutes	29	12%
	d) 90 minutes	38	16%
	e) two hours or more	19	8%
26.	The ancillary activities should have covered:		
	a) much more material	4	2%
	b) somewhat more material	10	4%
	c) material covered was adequate	193	79%
	d) somewhat less material	26	11%
	e) much less material	10	4%
27.	Instructions for the ancillary activities were clear:		
	a) strongly agree	60	25%
	b) moderately agree	109	45%
	c) neutral	38	16%
	d) moderately disagree	25	10%
	e) strongly disagree	10	4%
28.	Ancillary activities were relevant to the TV program:		
	a) strongly agree	68	28%
	b) moderately agree	108	45%
	c) neutral	49	20%
	d) moderately disagree	14	6%
	e) strongly disagree	3	1%

TABLE 10 -- CONTINUED

Item	Content	Frequency	Percentage
29.	Time allowed for completion of the ancillary activities was adequate:		
	a) strongly agree	71	29%
	b) moderately agree	109	45%
	c) neutral	40	16%
	d) moderately disagree	18	7%
	e) strongly disagree	4	2%
30.	Ancillary activities were practical and applicable to the classroom:		
	a) strongly agree	54	22%
	b) moderately agree	99	41%
	c) neutral	65	27%
	d) moderately disagree	22	9%
	e) strongly disagree	2	1%
31.	Too much reading material was assigned for class preparation:		
	a) strongly agree	39	16%
	b) moderately agree	52	21%
	c) neutral	68	28%
	d) moderately disagree	56	23%
	e) strongly disagree	28	11%
32.	Preparatory readings should have been more relevant to the ancillary activities:		
	a) strongly agree	13	5%
	b) moderately agree	39	16%
	c) neutral	114	47%
	d) moderately disagree	51	21%
	e) strongly disagree	24	10%
33.	The materials on the reference shelf were not relevant to the ancillary activities:		
	a) strongly agree	8	3%
	b) moderately agree	25	11%
	c) neutral	111	49%
	d) moderately disagree	52	23%
	e) strongly disagree	31	14%

TABLE 10 -- CONTINUED

Item	Content	Frequency	Percentage
34.	The assigned homework was quite useful:		
	a) strongly agree	35	15%
	b) moderately agree	90	37%
	c) neutral	67	28%
	d) moderately disagree	38	16%
	e) strongly disagree	10	4%
35.	What is your overall evaluation of today's ancillary activities?		
	a) excellent	30	13%
	b) very good	79	33%
	c) good	87	36%
	d) fair	43	18%
	e) poor	1	.4%
36.	Did you feel there were any activities that were especially innovative or creative in today's session?		
	a) yes	31	13%
	b) no	199	85%

The respondents indicated that they occasionally or rarely made use of the reference materials during class time. Fourteen percent felt the reference materials were relevant; 49% responded neutrally to this item; and 37% did not feel the reference materials were relevant.

Feedback Questions

The participants were asked to rate various course components for the quantity of useful information they received from each as compared to a traditional instructor-taught course. They used a 5-point scale with 1 indicating outstanding and 5 indicating unacceptable. The frequencies of

responses to these items are presented in Table 11. A rank ordering of the various activities is presented in Table 12. The site monitors and videotaped TV programs received ratings between "outstanding" and "good". The seminars, preprogram activities, ancillary activities, follow-up activities, and reference materials received ratings between "good" and "average". These ratings confirm the results of the ratings of the individual activities. The videotaped programs and seminars were rated quite favorably in the individual ratings and the follow-up activities and reference materials were rated less favorably.

Equipment Functioning

How well did the technology involved function?

The videotaped programs and the live, interactive seminars were transmitted from the University of Kentucky television studios via the ATS-6 satellite system. Questions for the live, interactive seminars were reported from the five main AESP sites via the ATS-3 satellite system, and for all ten AESP sites via teletype and telephone. The site monitors rated the quality of the audio and video signals that were received for each session by completing the Equipment Report and Student Satisfaction Form. The site participants rated the quality of the audio and the video signals received by completing two items on the Instructional Activities Rating Form.

The results of the site monitors' ratings of the audio and video signals for the ATS-6 delivery system are presented in Table 13. The results of the participants' ratings are presented in Table 14.

TABLE 11

PART IV: FEEDBACK QUESTIONS

Item	Content	Frequency	Percentage
38.	Pre-program preparation compared to work usually assigned in other classes prior to covering material in class:		
	a) outstanding	31	13%
	b) good	110	47%
	c) average	81	35%
	d) poor	8	3%
	e) acceptable	2	1%
39.	Televised, interactive seminars compared to other seminars and class discussions:		
	a) outstanding	33	19%
	b) good	68	40%
	c) average	62	36%
	d) poor	8	5%
	e) unacceptable	1	1%
40.	Ancillary activities compared to class activities associated with other courses:		
	a) outstanding	33	14%
	b) good	89	38%
	c) average	102	43%
	d) poor	11	5%
	e) unacceptable	0	0%
41.	The videotaped TV programs compared to lectures usually associated with other courses:		
	a) outstanding	68	29%
	b) good	112	48%
	c) average	51	22%
	d) poor	5	2%
	e) unacceptable	0	0%
42.	Follow-up activities and homework assignments compared to similar activities in other courses:		
	a) outstanding	24	10%
	b) good	94	40%
	c) average	105	45%
	d) poor	8	3%
	e) unacceptable	3	1%

TABLE 11 -- CONTINUED

Item	Content	Frequency	Percentage
43.	On-site reference materials compared to materials placed on reserve by other instructors:		
	a) outstanding	21	9%
	b) good	77	35%
	c) average	104	47%
	d) poor	16	7%
	e) unacceptable	4	2%
44.	The site monitor as an effective course leader:		
	a) outstanding	69	30%
	b) good	127	55%
	c) average	34	15%
	d) poor	0	0%
	e) unacceptable	2	1%

TABLE 12

RANK ORDERING OF INSTRUCTIONAL COMPONENTS

	Instructional Component	Mean
1.	Site monitor	1.87
2.	Videotaped TV programs	1.97
3.	Televised, interactive seminars	2.28
4.	Pre-program preparation	2.31
5.	Ancillary activities	2.39
6.	Follow-up activities	2.45
7.	On-site reference materials	2.57

TABLE 13

SITE MONITORS' RATINGS OF THE AUDIO AND VIDEO SIGNALS
RECEIVED VIA ATS-6 SATELLITE SYSTEM

Site	4/14		4/21		4/28		5/05		5/12	
	Video	Audio	Video	Audio	Video	Audio	Video	Audio	Video	Audio
Huntsville, AL	3x3	3x3	5x5	3x2	4x4	3x3	5x5	3x3	3x3	3x3
Rainsville, AL	4x4	2x2	[5x4	3x1] *	[3x3	3x1]	5x5	3x3	[5x5	1x1]
La Follette, TN	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3
Norton, VA	4x4	3x3	4x4	3x3	5x5	3x3	5x5	3x3	5x5	3x3
Boone, NC	4x4	3x3	4x4	3x3	5x5	3x3	4x4	3x3	5x5	3x3
Cumberland, MD	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3
McHenry, MD	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3
Fredonia, NY	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3	[3x3	1x1]
Olean, NY	5x5	3x3	5x5	3x3	5x5	3x3	5x5	3x3	[1x1	1x1]
Edinboro, PA	4x4	3x3	4x4	3x3	5x5	3x3	5x5	3x3	5x5	3x3

Video Signal Rating Scale

Distortion and/or Noise Perceptibility

1. Picture content impossible to ascertain
2. Very perceptible distortion and/or noise but picture content ascertainable
3. Definitely perceptible distortion and/or noise
4. Barely perceptible distortion and/or noise
5. Imperceptible

Distortion and/or Noise Objectionableness

1. Extremely annoying
2. Very annoying
3. Definitely annoying
4. Sightly annoying
5. Not annoying

Audio Signal Rating Scale

Readability

1. Unreadable
2. Readable with difficulty
3. Readable with practically no difficulty, or no difficulty

Signal Strength

1. Faint signals or very weak signals
2. Fair signals
3. Good signals or very good signals

* [ ] indicates an unacceptable signal

TABLE 14

PARTICIPANTS' REACTIONS TO TELEVISION RECEPTION

Item	Content	Frequency	Percentage
11.	In general, the clarity of the picture on the TV set was:		
	a) excellent	40	16%
	b) very good	86	34%
	c) good	72	29%
	d) fair	36	14%
	e) poor	17	7%
12.	In general, the quality of the sound received from the TV set was:		
	a) excellent	43	17%
	b) very good	69	27%
	c) good	90	36%
	d) fair	31	12%
	e) poor	18	7%

The equipment worked at an acceptable level for 45 of the 50 possible occasions (10 sites by 5 deliveries), or with a reliability of 90%. Three of the occasions when an unacceptable signal was received occurred in Alabama. The Alabama sites make up the southern fringe of the satellite broadcast areas and they do not receive a stable signal. The poor signal received during the fifth session in Fredonia, NY resulted from an attempt to re-position the satellite for better southern reception. This resulted in a deterioration of the Fredonia site's signal such that they did not receive an acceptable signal for the second half of the fifth broadcast.

AESP will make two deliveries of each broadcast in the future, one to the northern sites and one to southern sites, in order to reach the

fringe areas more effectively. Olean, NY did not receive the fifth program because the HP receiver at that site was malfunctioning.

The site monitors' average rating of the distortion and/or noise perceptibility of the video signal received was 4.58, meaning that the noise was between barely and imperceptible. The average rating of the distortion and/or noise objectionableness was 4.56, meaning that it was between slightly and not annoying. The participants rated the video signal received between "very good" and "good."

The site monitors' average rating of the readability of the audio received was 2.86, meaning the signal was readable with practically no difficulty or very little difficulty. The average rating for the audio signal strength was 2.76, meaning the signal strength was good. The participants rated the audio signal between "very good" and "good."

Six of the sites were equipped to transmit two-way audio via ATS-3. These ratings are presented in Table 15. This capability was used during the seminars for the participants to relay questions to the panelists in the Lexington, KY studio. The reliability of the functioning of the VHF equipment was only 50%. Half the sites were unable to transmit questions via ATS-3 during the two seminars. Five of the sites were equipped with teletype and all of the sites had access to a telephone in order to submit questions to the Lexington studio.

TABLE 15

SITE MONITORS' RATINGS OF VHF FUNCTIONING

Location	Seminar One	Seminar Two
Huntsville	[1 x 1] *	[1 x 1]
LaFollette	[1 x 1]	[1 x 1]
Norton	[1 x 2]	[1 x 2]
Cumberland	3 x 3	3 x 3
Fredonia	3 x 3	3 x 3
Lexington	3 x 3	3 x 3

* [ ] indicates an unacceptable signal

CHAPTER IV

SUMMARY

In the Spring of 1977, the Appalachian Education Satellite Project delivered a one hour graduate level course entitled Visual Learning to 55 participants in 10 sites in Appalachia. The course was designed to assist teachers in applying television in their classrooms, including the proper use of the equipment, knowledge of the availability of local and national programming resources, and examination of attitudes and motivations with regard to the use of television in the classroom.

The course consisted of 5 videotapes and printed guides produced by the New York State Education Department's Bureau of Educational Communications in cooperation with the New York State Appalachian BOCES Consortium and funded by the Appalachian Regional Commission. These 5 tapes and 2 live, interactive seminars were broadcast via the ATS-6 satellite system from the University of Kentucky television studio. In addition, ancillary materials were developed at the University of Kentucky to supplement the audio-video portion of the course. These consisted of pre-program activities, in-class ancillary activities, follow-up activities, and supplementary reference materials.

A multivariate analysis of variance for pre- to posttest gains on the cognitive and attitude tests indicated site and site by administration differences for the cognitive test only. This means that some of the sites gained more than others on the cognitive test from the pre- to posttest administrations. The analysis also indicated that the participants made a significant gain on the cognitive test for pre- to posttest administrations, therefore they were able to learn the desired content.

The analysis also indicated that the participants' attitudes were negatively affected from pre- to posttest administrations of the attitude questionnaire. While the participants' reactions to the instructional activities were generally positive, one factor may have adversely affected their attitudes. Forty-six percent of the participants reported that they would be unable to use the information presented in the course. This factor may have led the participants to express a more negative attitude toward the concepts presented in the course.

The participants' attitudes were very positive toward the site monitors and the videotaped TV programs. Their attitudes toward the interactive seminars, pre-program preparations, and ancillary activities were slightly less positive. The least popular aspects of the course were the follow-up activities and the on-site reference materials.

An acceptable television signal was received 90% of the time. The major problem arose from the instability of the signal for the sites on the southern fringe of the satellite's broadcast area. In the future, AESP plans two deliveries - one to southern sites and one to northern sites - to alleviate this problem.

In conclusion, the participants were able to learn the cognitive content at a satisfactory level. They responded positively to the learning activities. The equipment functioned at a satisfactory level, and plans have been made to improve the technical aspects of course delivery. The participants' attitudes were negatively affected, possibly because of their inability to apply the concepts in their classrooms. Future AESP deliveries should strive to emphasize a broader applicability of course concepts, the identification of local resources to facilitate the application of course concepts, and a greater sensitivity to content designed to attain attitudinal objectives.

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APPENDIX 1

	Page
EXTERNAL REVIEW OF OBJECTIVES AND CONTENT OUTLINE	42
RATING SCALE FOR ANCILLARY ACTIVITIES	45

Appalachian Education Satellite Program
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

EXTERNAL REVIEW OF OBJECTIVES AND CONTENT OUTLINE (EROCO) #03

Please respond to the following areas. You may consider this as a guide in reviewing each objective and its content outline. Since this material is in draft form, please make notes throughout the document also.

Please return both the Objectives and the Outline.

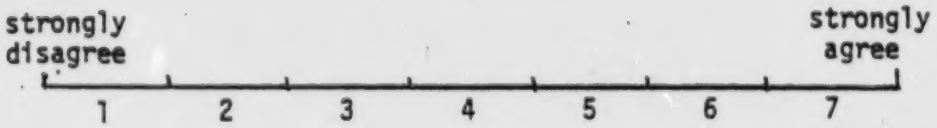
Topic of Unit: _____

Reviewer's Name: _____

Instructions

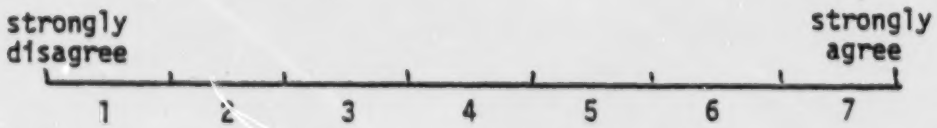
Place a check in the area above the number that reflects your attitude toward the statement directly above. Please comment in the section below.

A) The objectives reflect the most important issues for coverage of this topic.



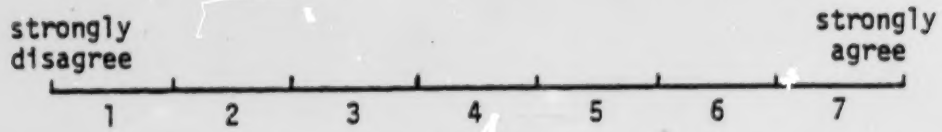
Comments:

B) The objectives are clear.



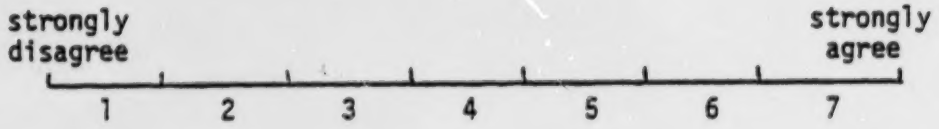
Comments:

C) The objectives are appropriate for the target audience.



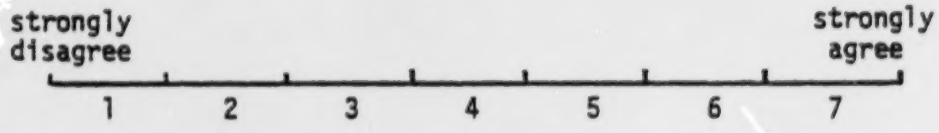
Comments:

D) The objectives and outline try to cover too much material.



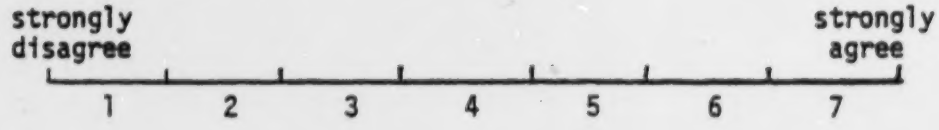
Comments: (what might be omitted?)

E) The content outline reflects a sufficient coverage of the topic.



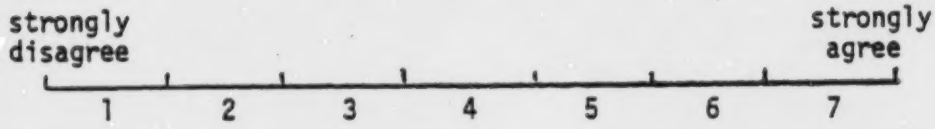
Comments: (what additional information might be included?)

F) The outline conveys a logical order for content development.



Comments:

G) The objectives and outline are relevant to the needs of the Appalachian Region.



Comments:

H) Do you have any suggestions for sources of information and supplementary materials which might be used for content development?

I) Do you know of any exemplary media on the topic?

J) Are the approaches identified for this course realistic in terms of material and economic support from the local school site?

Feel free to make comments throughout the document. Do you have any other general feedback?

Thank you for your help.

JD/mt/11/9/76

Appalachian Education Satellite Program
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

RATING SCALE FOR ANCILLARY ACTIVITIES (RSAA) #19

Instructions

Place a check in the area above the number or space that identifies your attitute toward the statement directly above. Please feel free to comment in the space below each item.

Ancillary Activity

1. Enough information is provided to complete the ancillary activity.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

Comments:

2. The ancillary activity complements the unit objectives.

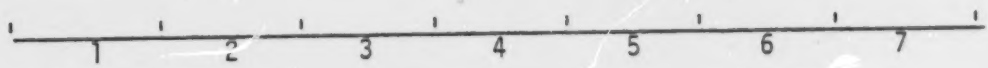
Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

Comments:

3. The ancillary activity needs to be broadened so it covers the unit materials more thoroughly.

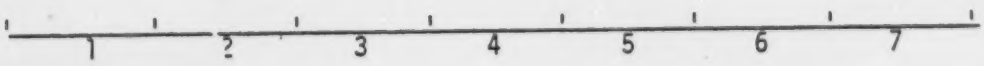
Strongly Disagree — Strongly Agree



Comments:

4. The directions are difficult to understand.

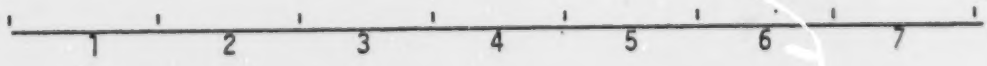
Strongly Disagree — Strongly Agree



Comments:

5. This particular type of activity is the most effective means by which to obtain the objectives.

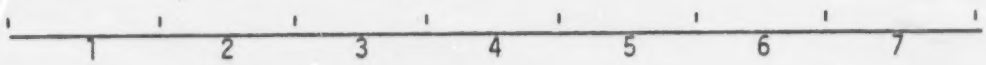
Strongly Disagree — Strongly Agree



Comments:

6. The ancillary activity is too simplistic.

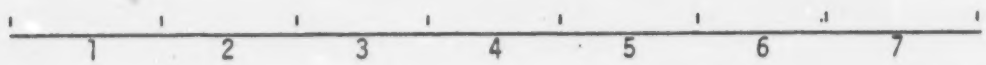
Strongly Disagree — Strongly Agree



Comments:

7. The student will gain important knowledge from completing the ancillary activity.

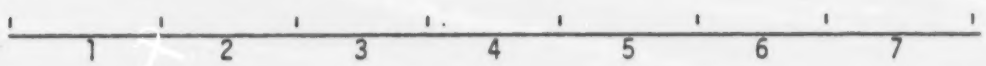
Strongly Disagree — Strongly Agree



Comments:

8. The student will gain important experience from completing the ancillary activity.

Strongly Disagree — Strongly Agree



Comments:

9. The ancillary activities should be able to be completed in the time allotted.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

Comments:

10. The ancillary activity should appeal to the intended audience.

Strongly Disagree — Strongly Agree

1 2 3 4 5 6 7

Comments:

Any other comments or suggestions on the ancillary activity.

JD/s1/1/7/77

APPENDIX 2

Participants in Visual Learning Seminars

April 21 seminar

Mrs. Dorothy Owen
Radio & ITV Consultant
South Carolina Dept. of Education

Mr. Harold Hill
Professor of Communication
University of Colorado

Mr. John L. Debes
Educational Consultant
Eastman Kodak Company

May 12 seminar

Mrs. Sandy Welch
Director of Programming
Kentucky Educational Television

Dr. Charles Klasek
Associate Professor of Media
Southern Illinois University

Ms. Rebecca Mushko
Junior High School teacher
Roanoke, Virginia

APPENDIX 3

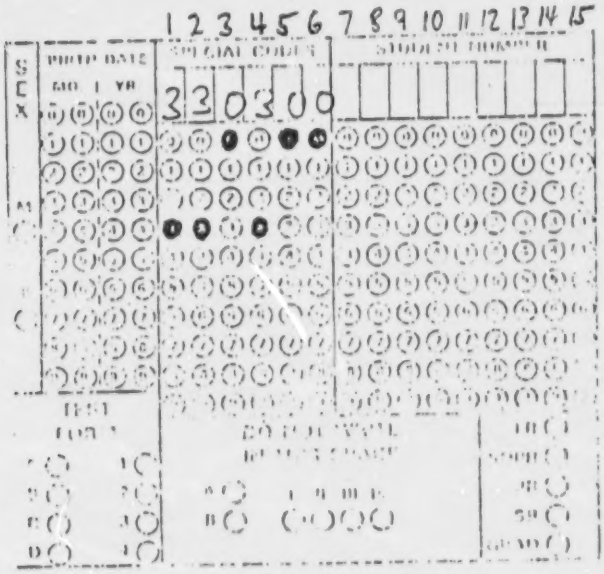
	Page
COMBINED ATTITUDE AND BACKGROUND QUESTIONNAIRE FOR VISUAL LEARNING	51
ATTITUDE QUESTIONNAIRE FOR VISUAL LEARNING	55
INSTRUCTIONAL ACTIVITIES RATING FORM FOR VISUAL LEARNING	57
EQUIPMENT REPORT AND STUDENT SATISFACTION FORM	63
EQUIPMENT TROUBLE LOG	64

Appalachian Education Satellite Program
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

COMBINED ATTITUDE AND BACKGROUND QUESTIONNAIRE FOR VISUAL LEARNING #33

This questionnaire is divided into 2 parts. The first part is concerned with your attitudes towards television and the second part asks for some background information. Please answer as truthfully as possible. Your answers do not affect your grade in the course, but also help us to assess the effectiveness of the course and suggest improvements.

Be sure you have an Op-Scan form titled "General Purpose Answer Sheet." Write your name on the upper left hand corner on the back of the form. Fill out the Special Codes and Student Number boxes as follows:



in columns 1-6 fill in 330300

in columns 7-10 fill in <u>your</u> four-digit student number

Use a soft-lead (#2) pencil to mark the answer sheet -- do not use a pen or ball-point. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other marks on the answer sheet.

For each statement in the first part mark:

5 - If you strongly agree with the statement
4 - If you moderately agree
3 - If you feel neutral
2 - If you moderately disagree
1 - If you strongly disagree.

The second part of the questionnaire asks for background information. The information obtained is potentially very helpful in conducting the course and in evaluating its usefulness. Please answer all questions on the form unless a question does not apply or if you cannot remember the information asked for. This information is kept confidential.

1. Cable television can generate a sense of community.
2. Videotapes can be used to promote self-awareness.
3. Videocassette players are difficult to use.
4. Television can teach values.
5. Adults should watch certain TV shows with their children.
6. There is nothing on commercial TV that my students should watch.
7. Students don't read well because they watch too much television.
8. Television is forcing teachers to be more entertaining.
9. There are no programs broadcast during the school day that could be used in my classroom.
10. People ought to stop criticizing children's TV programs and commercials.
11. TV can be used in reaching students of all ages and backgrounds.
12. Curriculum guides (teacher's guides) for ITV programs are helpful.
13. TV and video can help teachers to individualize their classes.
14. People can learn some things more effectively from a TV than from a teacher.
15. After parents, TV has become perhaps the most potent influence on the beliefs, attitudes, values, and behavior of young people.
16. For some children, TV may provide more sustenance than their home lives.
17. Students watch so much television at home that they should not watch it during school hours.
18. Distributing TV scripts in advance of programs to be broadcast for teaching reading can advance student's reading skills.
19. A teacher should be with students before and after viewing TV or video.
20. Teachers need not be in their classrooms while their students are watching a program.
21. Sex

    1. Male
    2. Female

23. Description of community in which you teach (or work in some other area in education)

    1. Rural
    2. Suburban
    3. Urban

24. Age in years as of last birthday

1. 21-30
2. 31-40
3. 41-50
4. 51-60
5. 61 or over

25. Score on GRE Verbal (leave blank if you have not taken it or do not remember score)

1. 400 or below
2. 401-450
3. 451-500
4. 501-550
5. 551 or above

26. Score on GRE Quantitative (leave blank if you have not taken it or do not remember score)

1. 400 or below
2. 401-450
3. 451-500
4. 501-550
5. 551 or above

27. Position during 1976-1977 academic year

1. Classroom teacher
2. Librarian
3. Media Specialist
4. School administrative position
5. Other

28. Choose the grade range that closely approximates the grades you work with

1. Elementary - all grades
2. 1-3
3. 4-6
4. 7-9
5. 10-12

29. Work experience in teaching

1. 1 year or less
2. 2-4 years
3. 5-8 years
4. 9-15 years
5. 16 years or more

30. Are you taking this course for credit?

1. Yes
2. No

31. If you have registered for credit where would you like to obtain credit? (leave blank if not registered for credit)

    1. University of Kentucky
    2. Other College or University

32. What was your undergraduate grade-point average? (convert to four-point scale where A=4)

    1. less than 2.50
    2. 2.51-2.75
    3. 2.76-3.25
    4. 3.26-3.50
    5. 3.51-4.00

33. What was your graduate grade-point average? (convert for four-point scale where A = 4)

    1. less than 3.00
    2. 3.01-3.25
    3. 3.26-3.50
    4. 3.51-3.75
    5. 3.76-4.00

34. Last degree completed

    1. High School Diploma
    2. Baccalaureate
    3. Master's
    4. Specialist
    5. Doctorate

35. If you are currently enrolled in a college program which of the following best describes your purpose?

    1. Baccalaureate degree
    2. Master's degree or Doctorate
    3. Enrolled in courses to maintain teaching certificate
    4. Other
    5. Not enrolled

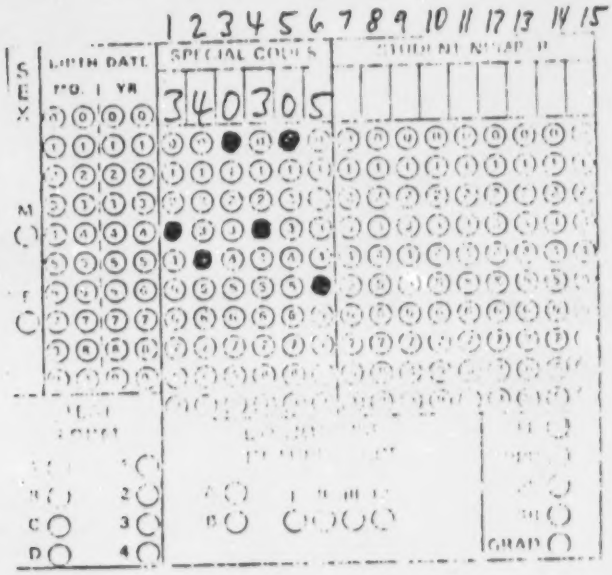
DMM/mt/3/29/77

Appalachian Education Satellite Program
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

ATTITUDE QUESTIONNAIRE FOR VISUAL LEARNING #34

This questionnaire is concerned with your attitudes towards television. Please answer as truthfully as possible. Your answers do not affect your grade in the course, but help us to assess the effectiveness of the course and suggest improvements.

Be sure you have an Op-Scan form titled "General Purpose Answer Sheet." Write your name on the upper left hand corner on the back of the form. Fill out the Special Codes and Student Number boxes as follows:



in columns 1-6 fill in 340305

in columns 7-10 fill in <u>your</u> four-digit student number

Use a soft-lead (#2) pencil to mark the answer sheet -- do not use a pen or ball-point. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other marks on the answer sheet.

For each statement mark:

5 - If you strongly agree with the statement
4 - If you moderately agree
3 - If you feel neutral
2 - If you moderately disagree
1 - If you strongly disagree

The information obtained is potentially very helpful in conducting the course and in evaluating its usefulness. Please answer all questions on the form. This information is kept confidential.

1. Cable television can generate a sense of community.
2. Videotapes can be used to promote self-awareness.
3. Videocassette players are difficult to use.
4. Television can teach values.
5. Adults should watch certain TV shows with their children.
6. There is nothing on commercial TV that my students should watch.
7. Students don't read well because they watch too much television.
8. Television is forcing teachers to be more entertaining.
9. There are no programs broadcast during the school day that could be used in my classroom.
10. People ought to stop criticizing children's TV programs and commercials.
11. TV can be used in reaching students of all ages and backgrounds.
12. Curriculum guides (teacher's guides) for ITV programs are helpful.
13. TV and video can help teachers to individualize their classes.
14. People can learn some things more effectively from a TV than from a teacher.
15. After parents, TV has become perhaps the most potent influence on the beliefs, attitudes, values, and behavior of young people.
16. For some children, TV may provide more sustenance than their home lives.
17. Students watch so much television at home that they should not watch it during school hours.
18. Distributing TV scripts in advance of programs to be broadcast for teaching reading can advance student's reading skills.
19. A teacher should be with students before and after viewing TV or video.
20. Teachers need not be in their classrooms while their students are watching a program.

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Appalachian Education Satellite Program
Resource Coordinating Center
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

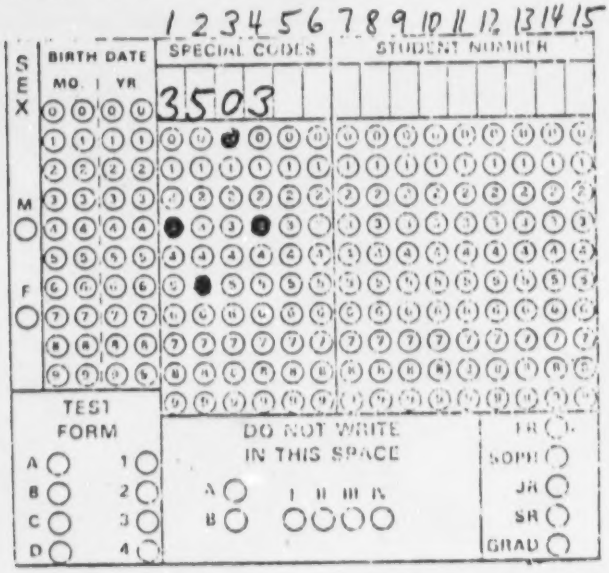
INSTRUCTIONAL ACTIVITIES RATING FORM FOR VISUAL LEARNING #35

This questionnaire is composed of four parts. Part I rates the taped TV programs, Part II rates the TV seminars, Part III rates the ancillary activities, and Part IV asks for an overall rating of the amount of useful information you received from each type of instructional medium. An additional blank piece of paper is provided for any comments, criticism, or suggestions you may have for course revision.

Parts I, II, and III of this questionnaire deal with your reactions to today's instructional activities. Only fill out the parts that correspond to today's activities, e.g. if you saw a TV seminar and did the ancillary activities, you would complete Parts II, III, and IV.

Please answer as truthfully as possible. Your answers do not affect your grade in the course, but help us to assess the effectiveness of the course and suggest improvements.

Mark your answers on the Op-Scan sheet provided. Turn your Op-Scan sheet so that the special codes and student number boxes are on your lower left. Fill out the special codes and student number boxes as indicated below:



in columns 1-4 fill in 3503

*in columns 5-6 fill in the class session number

in columns 7-10 fill in <u>your</u> four-digit student number

Use a soft-lead (#2) pencil to mark the answer sheet -- do not use a pen or ball-point. Be sure your mark fills the entire block of the response you wish to make. Your mark should be heavy, black and stay within the lines so that the machine can read your replies. If you change your mind or make a mistake, be sure that you erase completely. Do not make any other marks on the answer sheet.

Turn the sheet so that the words "General Purpose Answer Sheet" are on your upper left. Begin answering at the appropriate part for today's activities. Be careful that the item number on the questionnaire corresponds to the number on the Op-Scan sheet that you are marking.

<u>If any of the questions are not applicable, please leave those items blank</u>!

*The site coordinator will provide you with these numbers.

PART I: Visual Learning Videotapes

In questions 1-4, rate these components of the Visual Learning videotapes for their value in helping understand the overall content of the program using the following scale:

1 = excellent
2 = very good
3 = good
4 = fair
5 = poor

1. The presenter's discussion of material was:

2. The interviews of experts or practitioners were:

Rate the aspects of the program listed in questions 3-5 for the amount of time you feel should have been spent on these subjects using the following scale:

1 = much more time
2 = somewhat more time
3 = coverage was adequate
4 = somewhat less time
5 = much less time

3. Discussion of the theoretical aspects of each topic

4. Discussion of procedures for using the materials

5. Examples of the actual application of the techniques in the classroom

6. The program might have been more effective if they had covered:
(If the program coverage was adequate, mark option five.)

1) less material but in greater depth
2) less material
3) more material in less depth
4) more material relevant to the central issues of the topic
5) program coverage was adequate

7. Which of the following might have made the presenter more acceptable?
(If the presenter was acceptable, mark option four.)

1) if he spoke more clearly
2) if he appeared more knowledgable about the subject area
3) if he spoke in a more natural manner
4) he was quite acceptable

8. The program might have been easier to follow with:

1) less background noise
2) more careful organization of content
3) greater amplification of main points
4) more summary statements

9. What effect do you think the information contained in the program will have on your teaching?

   1) has little or no relevance for me in my teaching situation
   2) would like to use but probably won't be able to
   3) would like to use but don't understand enough
   4) plan to use
   5) already know or am using

10. The pace of the program should be:

   1) much slower
   2) somewhat slower
   3) pace was satisfactory
   4) somewhat faster
   5) much faster

11. In general, the clarity of the picture on the TV set was:

   1) excellent
   2) very good
   3) good
   4) fair
   5) poor

12. In general, the quality of the sound from the TV set was:

   1) excellent
   2) very good
   3) good
   4) fair
   5) poor

13. There were annoying distractions in the room while viewing TV:

   1) very often
   2) often
   3) occasionally
   4) rarely
   5) never

14. What is your overall evaluation of the TV program:

   1) excellent
   2) very good
   3) good
   4) fair
   5) poor

15. Do you have specific comments or suggestions regarding the TV program?

   1) yes
   2) no

   If your answer is yes, write your comments on the blank paper provided

PART II: Seminars

16. Which one of the following would have made today's seminar more effective? (If the seminar participants were fine, mark option four)

    1) the moderator answering the questions himself without guests
    2) use more teachers as guests
    3) use more professors or other experts as guests
    4) the seminar participants were fine

17. Which one of the following seminar formats might help you think of more meaningful questions to ask?

    1) have at the beginning of the seminar a 10 minute summary of course content covered since the last seminar
    2) show a 10 minute film with short segments from previous programs at the beginning of the seminar
    3) show at the beginning of the seminar a short film illustrating several new classroom demonstrations of material covered
    4) have the opportunity to use the whole seminar for question answering and discussion rather than spending part of the program for question stimulation
    5) other (please specify by writing on the blank paper provided)

18. The answers to the questions could have been more valuable if there had been:

    1) less discussion of theoretical aspects of the question
    2) more frequent use of specific classroom examples
    3) more direct answers to the questions
    4) less repetition in the guests' answers
    5) I was very satisfied with the answers I heard

19. The seminar moderator could have been more effective if he had:

    1) kept the guests on the topic better
    2) provided summary statements occasionally
    3) allowed each guest equal time to respond to questions
    4) kept the seminar moving at a faster pace so more questions could be answered
    5) the seminar moderator was fine

20. If there was not time to answer your questions on the seminar do you feel that the answer you will receive via teletype or VHF will be useful?

    1) yes
    2) no

21. Do you feel that answering questions via teletype or VHF is a service that needs to be continued?

    1) yes
    2) no

22. What is your overall evaluation of today's seminar?

1) excellent
2) very good
3) good
4) fair
5) poor

23. Do you have specific comments or suggestions about the seminar?

1) yes
2) no

If your answer was yes, write your comments on the blank paper provided.

PART III: Ancillary Activities

24. How often did you use materials from the reference shelf during class time?

1) very often
2) often
3) occasionally
4) rarely
5) never

25. How much time did you usually spend working on the ancillary activities during class?

1) 30 minutes or less
2) 45 minutes
3) 60 minutes
4) 90 minutes
5) two hours or more

26. The ancillary activities should have covered:

1) much more material
2) somewhat more material
3) material covered was adequate
4) somewhat less material
5) much less material

Rate questions 27-34 according to the following scale:

1) strongly agree
2) moderately agree
3) no opinion or neutral
4) moderately disagree
5) strongly diasgree

27. Instructions for the ancillary activities were clear.

28. Ancillary activities were relevant to the TV program.

29. Time allowed for completion of ancillary activities was adequate.

30. Ancillary activities were practical and applicable to the classroom.

31. Too much reading material was assigned for class preparation.

32. Preparatory readings should have been more relevant to the ancillary activities.

33. The materials on the reference shelf were not relevant to the ancillary activities.

34. The assigned homework was quite useful.

35. What is your overall evaluation of today's ancillary activities?

1) excellent
2) very good
3) good
4) fair
5) poor

36. Did you feel there were any activities that were especially innovative or creative in today's session?

1) yes
2) no

If yes, please identify those activities on the blank paper provided.

37. Do you have specific comments or suggestions about the class session?

1) yes
2) no

If your answer was yes, write your comments on the blank paper provided.

Part IV: Feedback Questionnaire

Rate the following seven instructional activities according to the quantity of useful information you received from each as compared with a traditional instructor-taught course.

1 = outstanding - received a lot more from the activity than you usually obtain from similar activities in a teacher preparation course
2 = good - received a little more from the activity
3 = average - received about the same amount from the activity
4 = poor - received somewhat less
5 = unacceptable - received a lot less information from the activity

38. Pre-program preparation compared to work usually assigned in other classes prior to covering material in class.

39. Televised, Interactive Seminars compared to other seminars and class discussions.

40. Ancillary activities compared to class activities associated with other courses.

41. The videotaped TV programs compared to lectures usually associated with other courses.

42. Follow-up activities and homework assignments compared to similar activities in other courses.

43. On-site reference materials compared to materials placed on reserve by other instructors.

44. The site monitor as an effective course leader.

45. Do you have any specific comments or suggestions concerning these comparison?

1) yes
2) no

If your answer was yes, write your comments on the blank paper provided.

Appalachian Education Satellite Programs
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

EQUIPMENT REPORT AND STUDENT SATISFACTION FORM (ERSS) #09

Program # _____ Site # _____ Date _____

Local Time: starting _____ ending _____

If you have had any equipment problems during this program, please describe the problem as specifically as possible and note any action taken.

If the problem involves any of the following pieces of equipment please complete the Equipment Trouble Log: television set, video tape recorder, teletype, DAA interface, telephone line, or cable system.

Did the above-mentioned problem result in an impairment of service during the program? Yes ___ No ___ . If yes, please explain:

The following items refer to the above program number (complete all that apply)

HP Receiver signal strength _____ Azimuth reading _____

Elevation reading _____

Please circle the appropriate response using the criteria outlined in the Site Coordinator's Manual: Remember to use the correct sequence in colums one and two as described in the manual.

Audio Signal		4-Channel Audio Signal								Video Signal	
TV Audio		Channel 1		Channel 2		Channel 3		Channel 4		TV Video	
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
___ go		___ go		___ go		___ go		___ go		4	4
___ no go		___ no go		___ no go		___ no go		___ no go		5	5
										___ go	
										___ no go	

ATS-6 System
___ operative
___ inoperative

Audio Signal

VHF	
1	1
2	2
3	3

___ go
___ no go

Temperature _____

Weather	Clouds	Wind	Snow	Ice
Little/none	___	___	___	___
Moderate	___	___	___	___
Heavy	___	___	___	___

Miscellaneous Problems (Check all that apply)

___ There was a delay in program broadcast
___ Low attendance. State probable reason _____
___ Cancellation or postponement of class. State probable reason _____
_____
___ Missing ancillary materials
___ Missing evaluation materials

Student Satisfaction:

Taped Program	Live Seminar	Ancillary Activities
___ excellent	___ excellent	___ excellent
___ very good	___ very good	___ very good
___ good	___ good	___ good
___ fair	___ fair	___ fair
___ poor	___ poor	___ poor

For Seminar Days only

1. How many questions were sent in from your site? _____
2. Did you transmit questions individually as they were generated ___ or in groups ___? (Check appropriate category) If questions were grouped, what was the usual number of questions in a group? _____

For Ancillary Sites:

3. How many times were you interrupted by a busy signal when attempting to transmit questions to the main site? ___
4. How long did it take to transmit the questions to the main site? _____

In the space below and on the back write the reactions and suggestions made by the students about today's activities. Include any suggestions, special problems, or requests that you might have. Also, write student numbers of absent students on back.

DMM/mt/11/15/76

Appalachian Education Satellite Programs
Resource Coordinating Center
Evaluation Component
302 Bradley Hall, University of Kentucky
Lexington, Kentucky 40506

EQUIPMENT TROUBLE LOG (ETL) #10

For the Week of: _____

Site: _____

Person Filling in Log: _____

Instructions: Fill in this form as breakdowns occur and repairs are made. Send the form to the RCC Evaluation Component at the end of each week. If there are no breakdowns during a week, write NONE across the form. Record all breakdowns and fill in all columns when work has been completed. Carry incomplete repairs over to the top of the log of the following week.

BREAKDOWN	REPAIR REQUEST	SERVICE CALL	REPAIR
Date and Time of Breakdown and Name of Malfunctioning Equipment	Date and Time Repair Request Made and Name and Company of Person Trouble Reported to	Date and Time of Initial Service Call and Description of Trouble	Date and Time Repair Completed and Comments on the Effectiveness of the Equipment and Repair Procedures

99

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